

FIG. 1

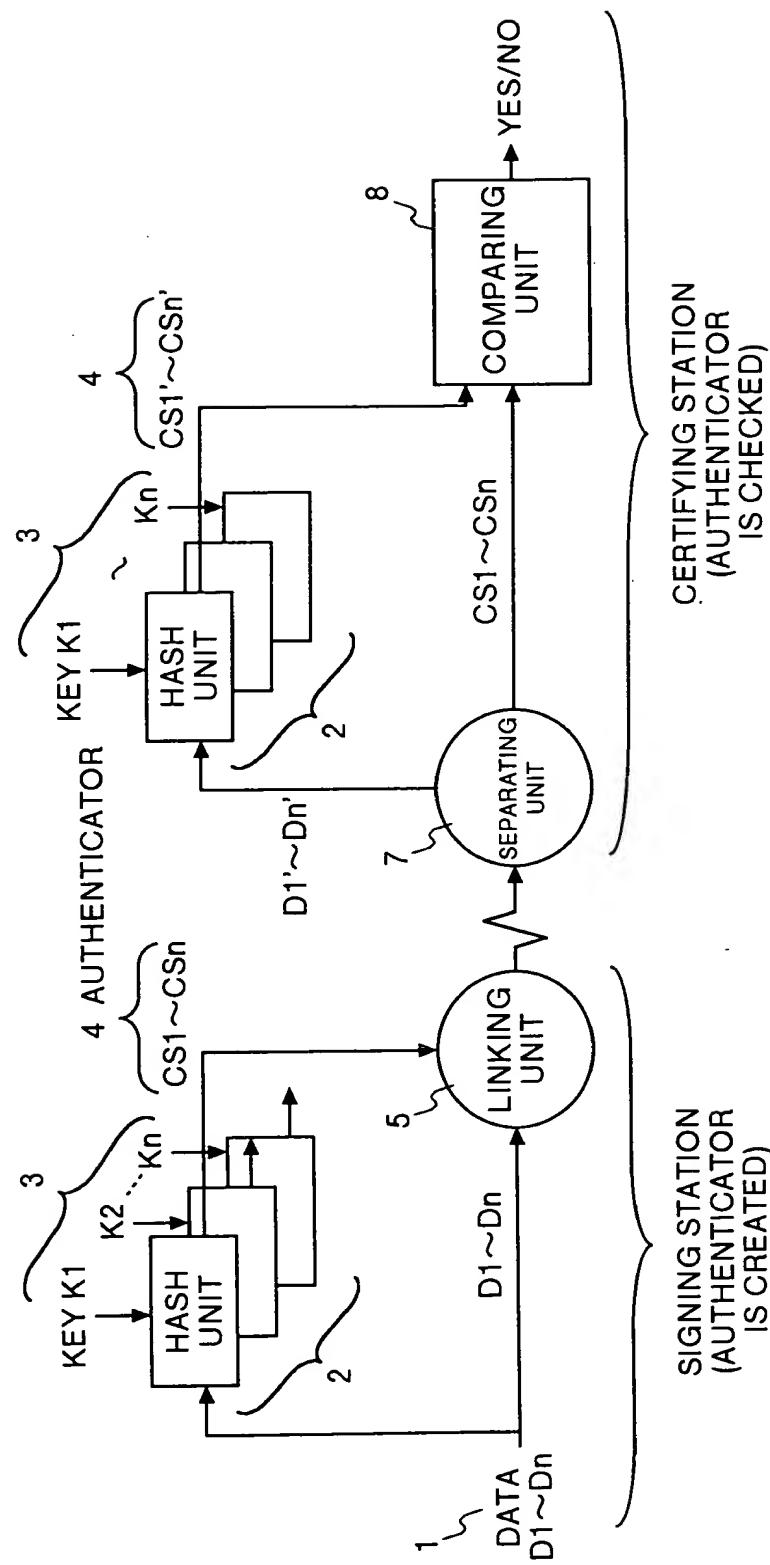


FIG.2A

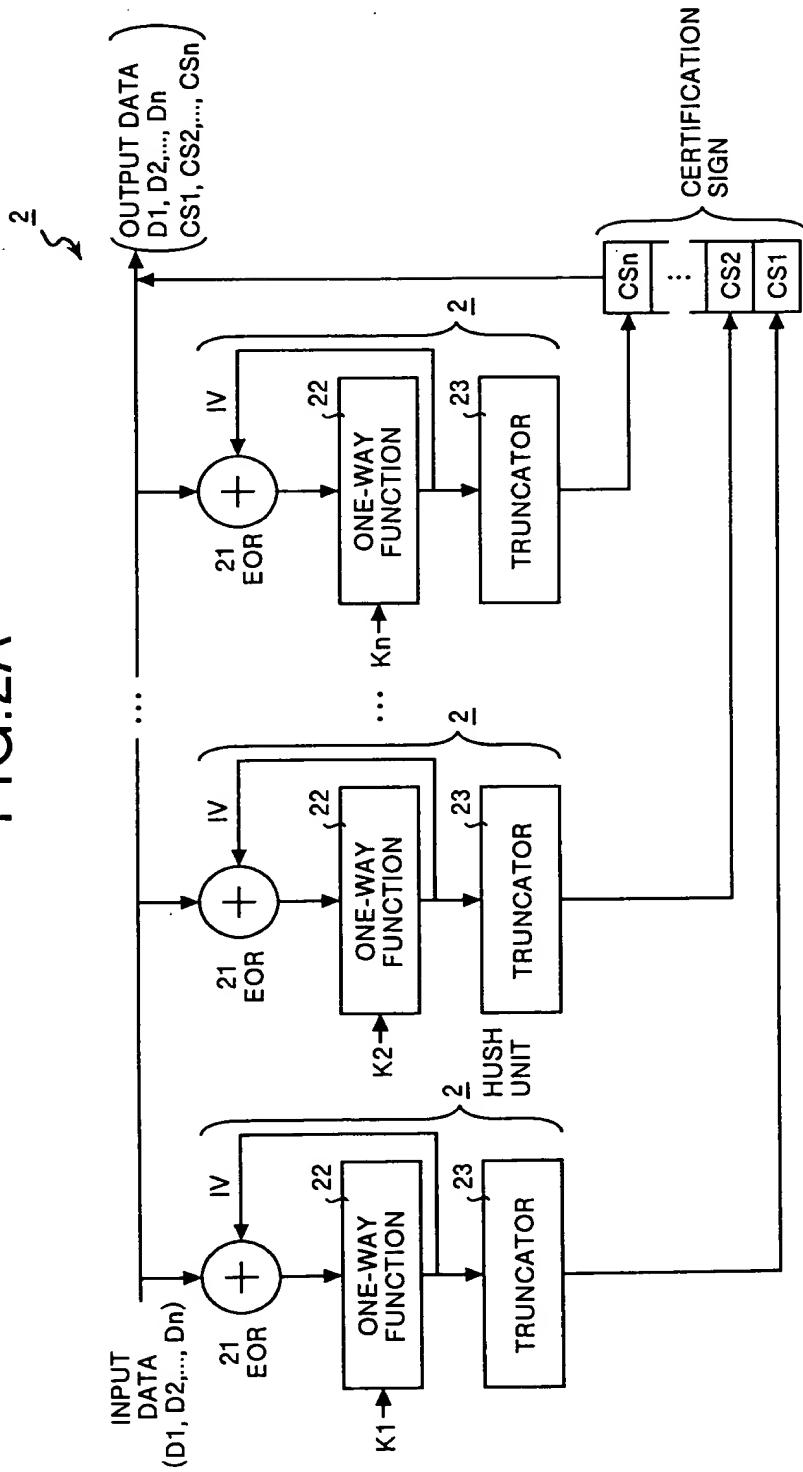


FIG.2B

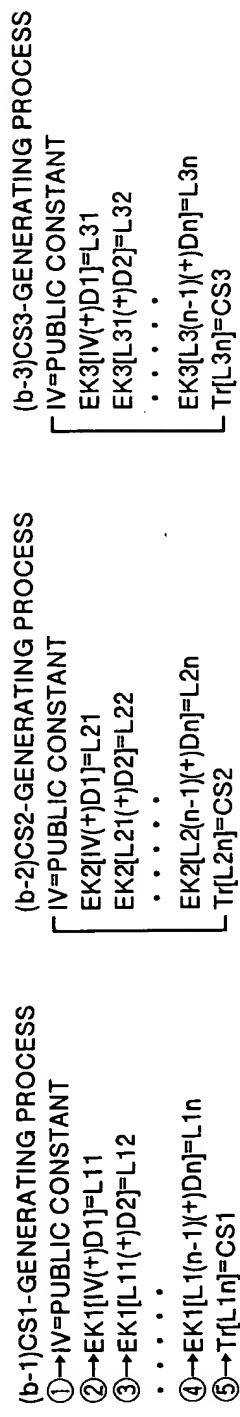


FIG. 3A

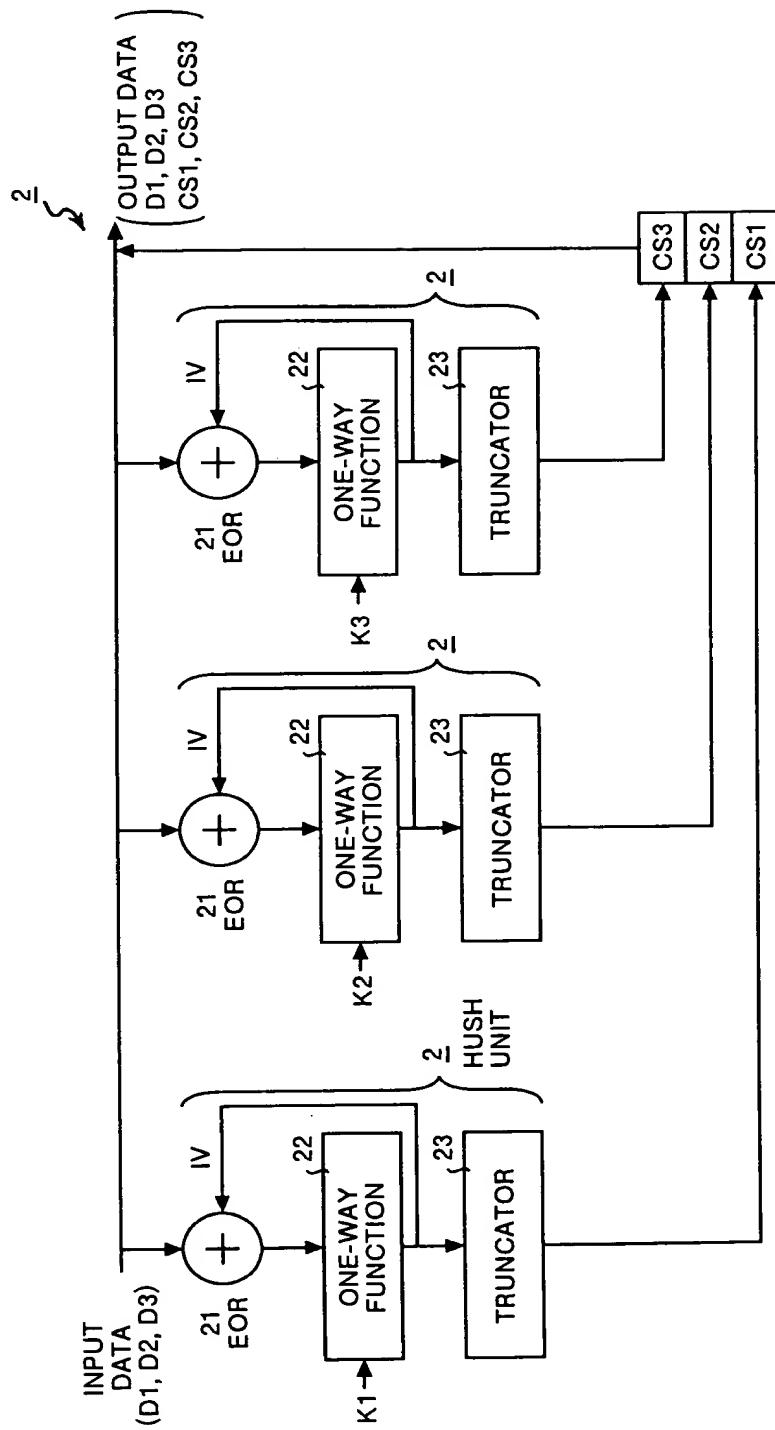


FIG. 3B

(b-1)CS1-GENERATING PROCESS
 ① \rightarrow IV=PUBLIC CONSTANT
 ② \rightarrow EK1[(V+)D1]=L11
 ③ \rightarrow EK1[L11(+)]D2=L12
 ④ \rightarrow EK1[L12(+)]D3=L13
 ⑤ \rightarrow T[L13]=CS1

(b-2)CS2-GENERATING PROCESS
 IV=PUBLIC CONSTANT
 EK2[(V+)D1]=L21
 EK2[L21(+)]D2=L22
 EK2[L22(+)]D3=L23
 T[L23]=CS2

(b-3)CS3-GENERATING PROCESS
 IV=PUBLIC CONSTANT
 EK3[(V+)D1]=L31
 EK3[L31(+)]D2=L32
 EK3[L32(+)]D3=L33
 T[L33]=CS3

FIG. 4A

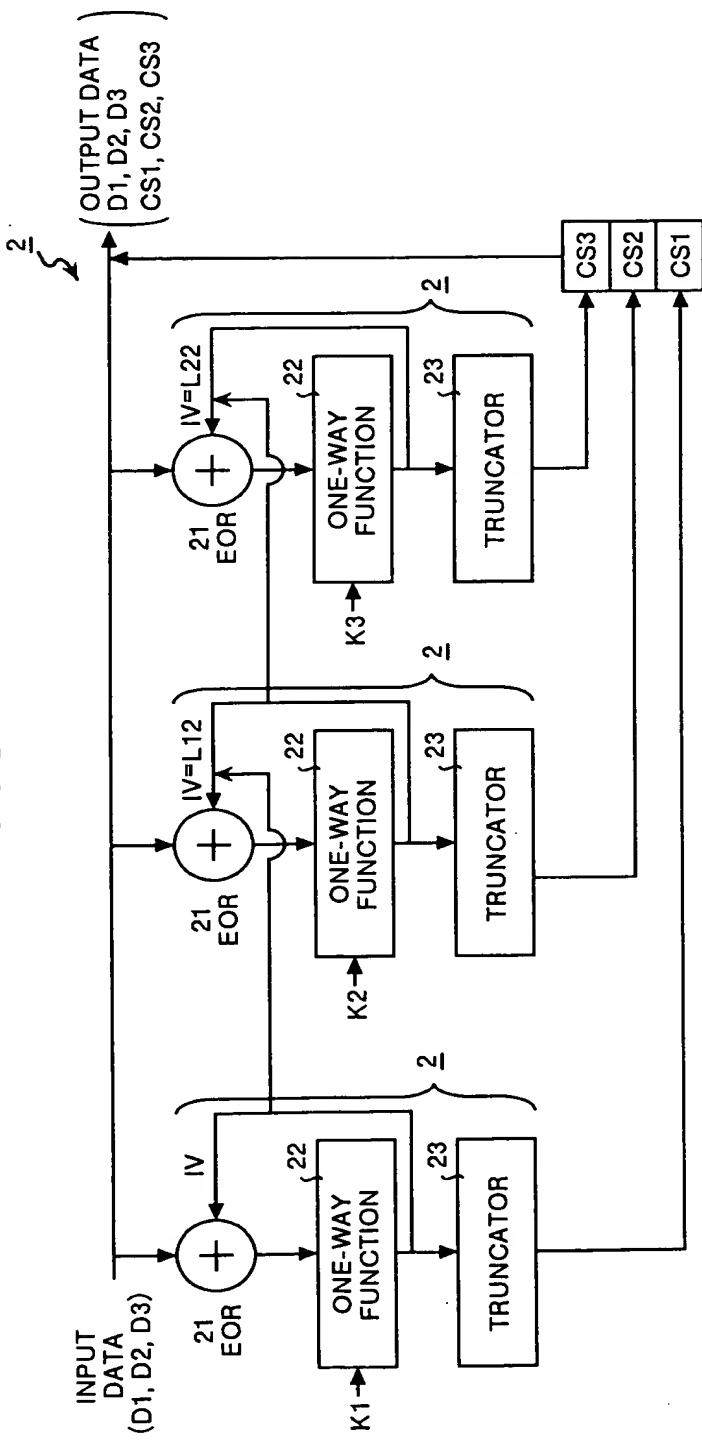
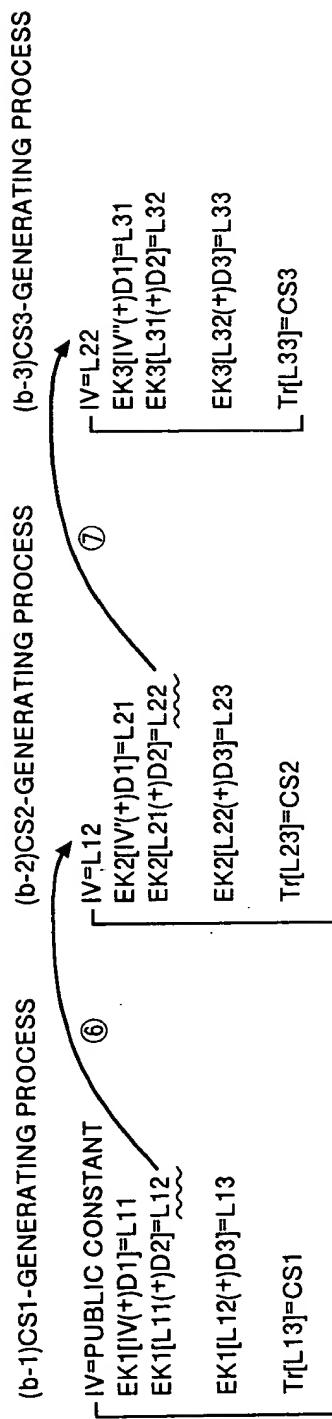
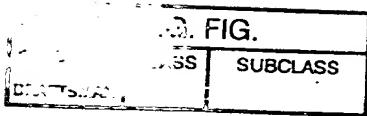


FIG. 4B





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FIG.5

EXAMPLE OF A DOCUMENT

THE PRESENT INVENTION

D₁ D₂

. 350Km/h

- THE PRICE IS SET TO ONE MILLION.

ABC AUTOMOBILE INDUSTRY
AFE16085

EXAMPLE OF A
AUTHENTICATOR IN A
DES-MAC SYSTEM

8 DIGITS (1 DIGIT=4 BITS)



FIG.6A

PRESENT INVENTION

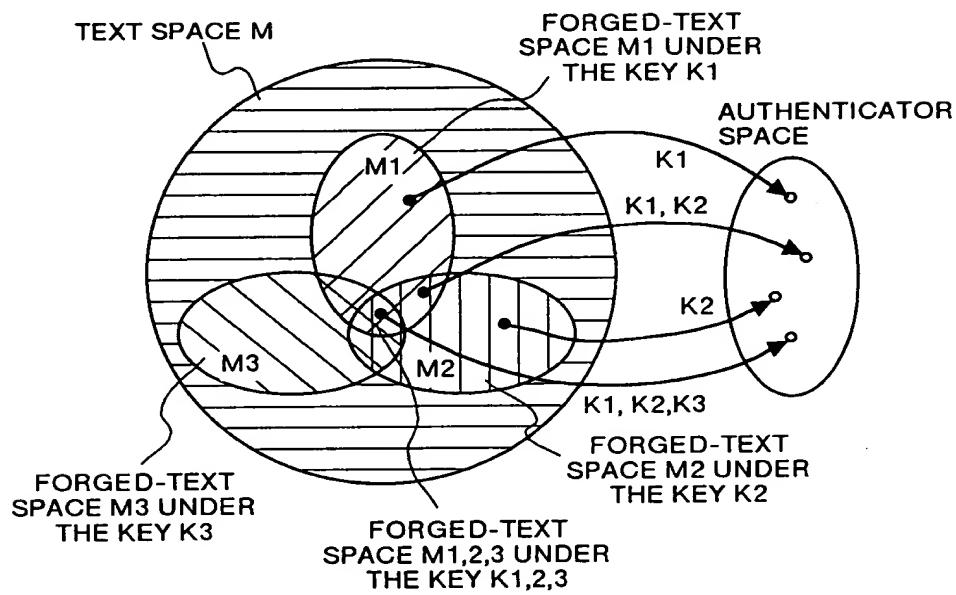


FIG.6B

CONVENTIONAL TYPE

